Healthcare Excellence Canada

Excellence en santé Canada

Real-Time Virtual Support

Promising practices to strengthen primary care in northern, rural and remote communities

If you are looking for strategies being used in other northern, rural and remote communities in Canada to improve access to safe, high-quality, team-based primary care, then this promising practice will be of interest to you.

About Healthcare Excellence Canada

Healthcare Excellence Canada (HEC) works with partners to spread innovation, build capability, and catalyze policy change so that everyone in Canada has safe and high-quality healthcare. Through collaborations with patients, essential care partners and people working in healthcare, we turn proven innovations into lasting improvements in all dimensions of healthcare excellence.

HEC focuses on improving care of older adults, bringing care closer to home, and supporting pandemic recovery and resilience – with quality and safety embedded across all our efforts. We are committed to fostering inclusive, culturally safe, and equitable care through engagement with different groups, including patients and essential care partners, First Nations, Métis and Inuit, healthcare workers and more.

Launched in 2021, HEC brings together the Canadian Patient Safety Institute and Canadian Foundation for Healthcare Improvement. We are an independent, not-for-profit organization funded primarily by Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

150 Kent Street, Suite 200
Ottawa, Ontario, K1P 0E4, Canada
1-866-421-6933 | info@hec-esc.ca

Social Media

Twitter | LinkedIn | Instagram | Facebook

Healthcare Excellence Canada honours the traditional territories upon which our staff and partners live, work and play. We recognize that the stewardship of the original inhabitants of these territories provides for the standard of living that we enjoy today. Learn more

The Rural Coordination Centre of BC (RCCbc) Real-Time Virtual Support (RTVS) Peer Pathways

What is the promising practice?

RTVS peer pathways increase access to virtual collegial support for healthcare providers serving rural, remote and Indigenous communities in BC and increase patient access to timely, appropriate virtual care, especially for rural, remote and Indigenous citizens.

This initiative is an example of what can be done if time and effort are taken to develop relationships and partnerships. This approach, a first of its kind in Canada, brings together partners across the Partnership Pentagram Plus (healthcare providers, healthcare administrators, community members, policymakers, educators, researchers, and non-profit leaders) to work collaboratively to plan, implement and evaluate the service and enable system change. All work is grounded on the principles of quality improvement methodologies of the Institute of Healthcare Improvement and framed around the Triple Aim.

The RTVS family includes both peer-facing and patient-facing pathways. Brief descriptions of the patient pathways are included here.

The RTVS peer pathways are accessible by phone or via video call (Zoom), providing physicians, residents, nurse practitioners, nurses, midwives – and in some cases first responders – with 24/7 instant access to virtual physicians based across BC. Support services are provided for urgent or non-urgent and can last from minutes to hours for patient cases such as case consultations, second opinions and ongoing patient support, patient transport navigation and coordination, point-of-care ultrasound and simulations.

Currently, specialized 24/7 instant access RTVS peer pathways include:

- Rural urgent doctor in-aid (**RUDi**): for critical, emergency and generalist medical support.
- Child health advice in real-time electronically (**CHARLiE**):for pediatric support from neonates through young adults.
- Maternity and newborn advice line (**MaBAL**): for pre-conception, prenatal, antenatal, intrapartum and postpartum presentations for both moms and newborns, via family physicians with expertise in maternal and newborn care.
- Rural outreach in critical care and internal medicine (**ROCCi**): this prototype aims to provide instant access to critical care and internal medicine support.

- In addition to the 24/7 instant access, RTVS quick reply pathways are available weekdays between 9:00 am and 5:00 pm, with a focus on dermatology, hematology, myofascial pain, rheumatology, thrombosis and neurology.

The peer support pathways would not be successful without physicians who want to be a part of a community of practice on the cutting edge of virtual support for equity of access to health care in rural BC and who are interested in:

- fostering a culture of curiosity and compassion,
- continuous, bidirectional learning, and
- your ongoing journey of Cultural Safety and Humility.

This is supported through the intentional work of the RTVS Fire Department (FD). Similar to firefighters performing non-fire related tasks while on call, by extension, this concept applies to the RTVS providers participating in non-clinical work that builds capacity in community and internally within the pathway. This work reflects the core principles of RTVS, the RCCbc, and the Joint Standing Committee on Rural Issues (JSC) with the end goal to wrap supports around rural providers and improve the quality of care for rural patients they care for. Examples of this work includes community outreach, simulations, and enhancing the rural understanding for the RTVS virtual providers.

Evaluation and impact

Evidence shows that RTVS peer pathways help ensure that rural and remote healthcare providers have virtual, instant access to a team of providers to help them provide high-quality, culturally safe, equitable, timely care for patients who live in rural and remote communities in BC. An evaluation in 2021-22 showed that 5,395 hours of clinical peer support were provided, representing 4,822 cases of varying complexity in 113 unique BC communities accessing RTVSs. Since its launch in April 2020 RTVS peer supports have seen a significant increase in calls. From only a handful of calls in the first weeks of the service, to over 1,900 interactions across RUDi, MaBAL, and CHARLiE in March 2023, and up to 134 unique communities calling for support.

Most of the call volume comes from remote nursing stations in Northern Health, with a handful of communities calling multiple times a day for support.

Examples of the beneficial outcomes that the peer pathways enable include:

- Stronger community of practice among rural healthcare providers.
- Increased opportunities to wrap care around patients in rural communities to facilitate collaborative team-based care.
- Reduction in isolation of healthcare providers who provide patient care in rural, remote and First Nations communities in BC.

- Increased opportunities for mentoring and clinical supports for rural healthcare providers, including cultural safety and cultural competency training delivered by people and providers who live in northern, rural and remote communities. This is achieved through the Rural Coaching and Mentoring Program (CAMP), funded by RCCbc through the University of British Columbia Faculty of Medicine Continuing Professional Development.
- Improved recruitment of rural healthcare providers.
- Increased referral to the most appropriate healthcare service for urgent health needs.
- Increased referral to primary care networks or other team-based care for patient follow-up.
- Better, more appropriate patient care at a lower cost.
- Access, costs, safety and equity of care all being monitored for unintended outcomes (see indicators in Appendix 1).

What do staff who support, and the providers who deliver and receive RTVS think of this approach?

- “Being a part of RTVS is the most important thing I've done and will probably ever do in my IT career. Working with rural physicians and front-line healthcare workers since 2005 has allowed me to observe the evolution of "no remote support at all" to what RTVS now provides. I have not encountered a rural healthcare provider to date who does not see the value of having access to video-enabled support in real time. Without RTVS many rural providers would have left rural communities in the past three years for centers with more supports. With RTVS we have been able to retain critical rural healthcare providers where that would likely not have been possible any other way in the past three years.” (RTVS IT Lead)
- “As a new rural physician, I practice much more confidently with the support of RTVS. Moreover, my experienced colleagues are just as keen as I to utilize the virtual supports as we see the results first-hand." (New-to-practice family doctor)

Key success factors that support sustainability

- RTVS is entrenched in the wider health system and the pathways are delivered and evaluated in partnership with the provincial government, health authorities, patients and many healthcare and community-based organizations.
- Each RTVS pathway undergoes continuous evaluation and improvement through a Learning Health System approach to ensure they meet patient care and provider needs.

All activities are grounded in principles of quality improvement and based on methodologies from the Institute of Healthcare Improvement.

- RTVS pathways have a funding source through the Government of BC and Doctors of BC (a voluntary association of approximately 14,000 physicians, medical residents and medical students in BC). A key enabler of RTVS was the formation of the JSC. Its goal is to enhance the availability and stability of physician services in rural and remote areas of BC by addressing the unique and challenging circumstances faced by physicians.
- Collaborative approach to development, implementation, evaluation and sustainability. Activities of RTVS peer pathways are guided by multiple community and system partners.
- RCCbc manages and is accountable for all activities of the RTVS peer pathways, including training for providers, administrative management and funding for non-clinical activities. RCCbc supports a wide range of initiatives, of which the RTVS Peer Pathways is one. Approximately 47 staff work at the RCCbc, a handful of which co-report to the regional health authorities across BC.
- Engagement and partnership with rural and remote communities to build relationships that inform the design and delivery RTVS peer pathways to meet the needs of the unique communities in a culturally safe way.

Opportunities for spread

- RTVS peer pathways can be expanded to cover other clinical areas, such as substance use, chronic pain, geriatrics, etc.
- Potential of either partnering with BC or implementing the same or similar services in their jurisdiction. Staff from the RCCbc are open to having conversations with partnership groups across Canada to share learnings and help them adapt the RTVS to meet the needs of their communities and providers.
- Peer facing RTVS pathways are likely replicable if they are community-driven. The expertise in providing guidance and advice exists in secondary and tertiary centres and the supporting technology is adaptable to any geographical area, but the key is for those providers to understand the similarities and differences that are unique to northern communities in Canada.
- Ontario has adapted the RTVS peer pathway model and it is reasonable to suggest that a national community of practice could be developed to share learnings.

Facilitators of spread

- Cultivating success in partnerships: it is important to have strong relationships with local, regional, and provincial partners to ensure strong awareness and support of RTVS services. Increased participation from RTVS partners in the iterative, developmental evaluation process is needed to reach consensus for more effectivereporting and knowledge translation.
- Measuring relationships: the quantitative data component will assess partnerships by collecting and sharing data, measuring the quality of connections, mapping relationships, measuring trust and value and helping to translate the findings into action. Ideally, this will be repeated over time to track progress and assist in course correction.
- Intentional, extensive engagement and relationship building with the communities who will be served: to ensure that programs meet their needs in a culturally safe way. This was accomplished by reviewing learnings from the Rural Site Visits project where RCCbc site visit teams visited 112 rural communities in BC, and had 404 meetings with local community members. These visits and meetings are ongoing.
- Contextualize RTVS in the healthcare landscape: there is a need to develop knowledge transfer guidelines and templates for communicating evidence-based value of RTVS pathways to policymakers, with particular emphasis on quality of service and outcomes.
- Accelerating progress and tracking barriers: ensuring long-term sustainability requires identifying emerging needs, reaching out to similar services and aligning the goals of partner organizations. A rolling three-year, collaboratively developed and owned road map would provide stability, phased growth and a harmonized approach to virtual care delivery.

Cost

Peer Pathways

Fiscal year	JSC funding (non-clinical)[1]	Ministry of Health funding (non-clinical)	NHA funding (clinical)	Total
2020/21	$807,000	$509,800	1,475,363	$2,792,163
2021/22	$494,000	$2,348,155	1,238,602	$4,080,757
2022/23 (Estimated)	$370,000	$3,099,465	1,342,527	$4,811,992

Funding covers everything including but not limited to community engagement, Zoom licences for rural providers, physician leadership, evaluation across the entire RTVS suite of services, operations supporting the peer pathways and clinical time for the virtual physicians on the peer pathways.

*MaBAL and CHARLiE providers are on contracts that include payment for availability to ensure the schedule is full 24/7 and there is a response within 10 minutes, plus payment for time-based on EMR encounters. MaBAL and CHARLiE physicians are paid at the family physician and specialist rate for services respectively (Health Employers Association of BC [HEABC] and Physician Master Agreement [PMA] determined). CHARLiE was based on availability plus fee for service, and that was not sustainable given the type of calls (especially those involving patient transfer), who is calling for support (predominately nursing outpost stations) and the number of patients (from these nursing outpost stations without public health nurses [PHNs]).

**RUDi providers are on a contract that is an hourly rate at the emergency medicine (non-hospital based) rate for services (HEABC and PMA determined), due to the volumes and rural ED MRP work they do.

For more information

To learn more about RTVS, contact:

- Katrina Bepple, Manager, Partnerships and Engagement, Rural Coordination Centre of BC (RCCbc): kbepple@rccbc.ca

RTVS Patient Facing Pathways

- First Nations virtual doctor of the day (FNvDoD): enables First Nations people in BC with limited or no access to their own doctors to make virtual appointments. This is a unique service for First Nations people and their family members living in BC, even if those family members are not Indigenous to enhance access to primary healthcare closer to home. The program includes doctors of Indigenous ancestry, and all doctors are supported to follow the principles and practices of cultural safety and humility.
- First Nations substance use and psychiatry service (FNvSUPS): provides individuals with access to specialists in addictions medicine and psychiatry, as well as mental health and wellness care coordinators. The services provided include (for example) harm reduction support, diagnosis support, medication review, treatment care planning, mental health and wellness support and connections to services as needed (such as with Elders and Knowledge Keepers). This is a referral-based service available at no

cost to all First Nations people and their family members living in BC, including family members who are non-Indigenous. Referring providers include general practitioners, nurse practitioners, registered nurses, licensed practical nurses, registered psychiatric nurses, addictions workers, wellness workers, traditional medicine specialists, mental health counsellors, community health representatives, treatment centre staff, the First Nations virtual doctor of the day service and mental health counsellors registered with First Nations Health Benefits. Specialists and care coordinators are dedicated to the principles and practices of cultural safety and humility and to delivering trauma-informed care.

- HEiDi : BC Emergency Medicine Network (bcemergencynetwork.ca): HEiDi is a physician support service for HealthLink BC 811. This free health information line for patients with non-emergency health inquires is available from 10:00 am to 10:00 pm daily. HEiDi physicians assist 811 nurses with urgent health inquiries they receive and give patients just-in-time information, comfort and ensure appropriate triage to health services. This discerning triage decreases emergency department (ED) wait times and can safely refer patients back to their family physicians.